

FROM TRADITIONAL CONFINEMENT DAIRYING TO GRAZING REPLACEMENT HEIFERS

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A Tale of Two Businesses:

I would like to share an account of a transition from a conventional dairy operation to our current Management Intensive Grazing (MIG) enterprise. In 1974, I joined my father who at that time had been dairying on a 265 acre farm in Lincoln County, Kentucky for twenty five years. We fed our registered Holsteins corn silage and alfalfa haylage and purchased a manufactured feed. Our herd of 70 Holsteins spent most of their time on concrete. We did make an effort to allow access to an exercise lot when weather permitted. However, during the greater part of the 1990's we spent a great deal of time treating various hoof problems. These problems included heel warts, abscesses and foot rot. I was spending more time trimming hooves than managing the dairy. Milk production was more than adequate, but herd health was not. We had always raised our own heifers, mostly on pasture; their health was acceptable. Foot problems were almost non-existent for these heifers.

We also had about 120 beef cows on another farm of 450 acres. Our beef herd was grazed as long as possible, then received alfalfa/orchardgrass balage when pasture resources declined. They were never on concrete and their health problems were minimal.

In April 2000, I attended the Kentucky Grazing School held in Washington County. The grazing techniques presented there seemed to be much simpler and more in

synch with nature than the drylot operation which we were employing for our dairy herd. Not only could the animals harvest their own feed, but they could spread their own manure! Perhaps the most important advantage, it seemed to me at the time was better hoof health. In addition, our farms were rolling to steep and better suited to grazing permanent pastures than to tillage. I decided to move any future operation in the direction of MIG.

When my father retired in August 2000, I made a business decision not to purchase his interest in the dairy herd. The dairy herd went to Louisiana at that time. While the dairy business had been very good to our family, I elected to pursue a business model which would provide less stress and more free time than the dairy offered.

I continued to raise the remaining dairy heifers on pasture. The beef operation was expanded by backgrounding purchased steers. In December 2001, I had the opportunity to become involved in a network of dairy heifer growers. I purchased 100 of these heifers from Michigan and began grazing them. In January 2003, I sold the beef herd and am now raising dairy heifers exclusively. There are about 400 of these heifers on the farm at a given time.

In order to better utilize our larger pastures, I decided that electric fencing was necessary. We had used solar chargers in the past, but realized that we needed reliable power over the entire farm. We installed high tensile wire on existing

permanent fences throughout the property. This allowed us to attach temporary polywire fencing wherever we liked. Since then, we have replaced some of our woven wire interior fencing with two or three stands of charged high tensile wire supported by fiberglass posts. Wood posts provide support at the ends and at corners. This fencing is far less expensive and much easier to install.

At this point, water became the limiting factor. With the advice of Bo Renfro and Ken Johnson from NRCS, and Dr. Jimmy Henning and Dan Grigson from the CES, I drew a plan to extend waterlines around both farms. Bo Renfro, District Conservationist in Lincoln County assisted by securing cost share money that enabled me to implement that plan, which included fencing off Hanging Fork Creek. We installed 4½ miles of 2 inch PVC water lines that provided water to our pastures. We utilized portable water tubs which coupled to the water lines with quick couplers. Most of this water is provided from a municipal water source; the remainder comes from a lake on the farm. We do have two spring fed water tanks. We try not to allow direct access to ponds. Our portable tubs have remained useful down to 0° F during winter by allowing a continuous small flow of water into the tank.

State (Phase I) cost share dollars allowed me to improve our cattle handling facilities and to install feeding pads of geotextile fabric and gravel. These feeding pads have been most valuable during periods of wet muddy weather.

Proper design of cattle handling facilities is very important in order that animals may be handled with a minimum of stress. In the past, the infrequent handling of our beef cows and purchased steers resulted in a great deal of stress for both cattle and people. Providing feed in a trough on a daily basis has allowed us to make friends with our heifers and has virtually eliminated the stress of moving and handling cattle. An

alternative to daily feeding in a trough can be a "lead steer" that has been trained to come when called. Where we once conducted "roundups" with trucks and lots of whooping and hollering, we can now call our heifers when we change pastures or gather them for sorting in the corral. This is primarily a result of a major change in philosophy and attitude of the people and training of the cattle. I feel very strongly that less stress results in better herd health and production as well as a much better attitude on the part of people. Moving and working with our heifers is far less stressful for both cattle and people now.

Our current feeding program for our heifers provides pasture and about 4-6 pounds of corn gluten feed, soyhull pellets or ground corn, depending on the quality and type of forage available. Two ounces of a custom mineral is topdressed over the feed in the trough. I utilize cool season grasses (mostly fescue) with clover during the spring months. From May until September 15, we graze about 80 acres of alfalfa/orchardgrass pasture in addition to the fescue/clover pastures. From September 15 until November 1, the alfalfa is allowed to regrow to provide root reserves for winter. During this time, the heifers have standing corn and fescue/clover pastures. After November 1, we offer the remaining dormant alfalfa/orchardgrass. When the alfalfa/orchardgrass is gone, the heifers get stockpiled fescue that we hope will last until green up in March. Since we will not normally have enough stockpiled fescue to provide all the feed through winter, we have wrapped alfalfa/orchardgrass balage that we can unroll in the pasture. Since it can be muddy and cold when feeding balage, an option to consider is feeding this in November when the ground is drier and the temperatures are warmer. My hope is that this strategy will save more of the stockpiled fescue until winter and that we will not have to feed as much of the balage in those colder months. Winter annuals such as rye or wheat can provide winter and spring grazing if planted early enough.

I utilize soil samples from all of our pastures and hay fields annually to provide direction for the application of fertilizer and lime. Most fertilizer is applied in the fall when fields are usually dry and fertilizer dealers are not as busy.

In addition to grazing our dairy heifers, we produce alfalfa/orchardgrass hay for sale. There were two barns available to store that hay on the former dairy. We have converted two tobacco barns for additional storage. We raised 70 acres of alfalfa for sale this past year, while using another 80 acres for grazing and haylage. This hay for sale is baled in small square bales for the horse and dairy markets. Hay not meeting this quality is fed to our heifers. We graze our alfalfa in November to gain pasture days and to aid in the control of weevils.

A major challenge to livestock producers is to reduce our reliance on stored feedstuffs by extending the grazing season. In order to do this, we must consider new ways of utilizing traditional crops and think about non-traditional crops. Recently we have used standing corn as fall pasture after we conclude grazing alfalfa on September 15. We have been able to produce good gains with this corn. Small grains such as oats and rye provide good fall, winter and spring grazing. We have tried turnips with the oats. There are many forage species available to producers and various ways to use these forages, but stockpiling fescue has the potential to create the largest impact on our profitability by reducing our reliance on stored feeds for winter. This practice has been proven time and again to provide low cost feed with a minimum of labor.

While I have experience with corn silage, alfalfa hay and cool season grass/clover pastures, I have read about many new forages and new uses for traditional ones. We drilled perennial ryegrass into a thinning stand of alfalfa. We have experimented with turnips and chicory. Our imagination may

be the only limit to extending the grazing season.

A Tale of Two Seasons:

The winter of 2004-2005 in our area was one of excess rain and saturated soils. Daily feeding became a challenge due to the mud. "They don't make boots tall enough!" Getting feed to troughs in pastures was a struggle as was feeding haylage. Higher traffic areas became pugged. The heifers did not gain as they should have. I vowed to make changes that would solve these problems. During this past summer, we installed more geotextile fabric and gravel feeding pads, especially in winter feeding areas. We extended gravel roads to enable us to get to those feeding areas also. It is my hope that future winter feeding seasons will be more successful than last year.

After a mild spring with adequate, but not excessive moisture, we harvested and wrapped a normal first cutting of alfalfa/orchardgrass balage. Soon thereafter, rains became infrequent and the soil slowly began to dry. By July we were becoming concerned about smaller hay yields and slowing grass regrowth. Only the rain produced by Hurricanes Dennis and Katrina saved crops and pasture from complete failure. September and October saw less than an inch of rain each. Our two spring fed water tanks slowed to a trickle. We had to forgo grazing the pastures which were served by these two spring fed tanks even though they still had grass available. Thank heaven for the municipal water which served most of our farm! While neighbors began hauling water to cattle, we were able to keep rotating our heifers and harvesting what grass was still there. The increased forage utilization resulting from MIG was allowing our heifers to continue to gain reasonably well. Other managers had been feeding hay for some time in many cases. The result of continuous grazing was evident. Our pastures, while not lush by

any means, still had some forage available and would have nutrient reserves intact. On September 20, we began grazing corn with our >1000 lb heifers. They gained over 2 lbs per day through October and November. Eighteen acres of standing corn provided grazing for 115 1000 lb heifers for 55 days. We still have 60 acres of stockpiled fescue and wrapped balage to provide for the winter months. Clearly the benefits of MIG were paying dividends in the form of increased forage utilization. These benefits were satisfactory gains and ultimately, a profit.

My challenge to you, then, is to seriously consider the benefits of a Management

Intensive Grazing system. The fencing technology is proven and available. Our humid climate and topography are ideally suited to grazing. Our toolbox contains many forage species that we can use to form our own system. A grazing system can also provide a very healthy environment for our livestock. Grazing cattle also provide the benefits of decreased runoff into streams and reduced dependence on fossil fuels and fertilizer, if managed properly. All this can be achieved at a relatively low cost. Best of all, Management Intensive Grazing can provide a very satisfying lifestyle for both man and livestock.